## **IPR Follow Up Questions**

1. At several points the Initial Publication refers to holding costs within inflation per the Strategic Plan or amounts of inflation that a budget proposal absorbs. What is the source and vintage of the assumed inflation rate(s) in the initial IPR proposal supporting these statements?

BPA inflation assumptions are informed by the projected changes in the U.S. GDP Price Deflator. In order to remain at or below the rate of inflation, total average IPR program costs are at or below 2.3% per year.

2. Please provide a detailed breakdown of the components of the proposed undistributed reduction.

Response will follow when available.

3. Please provide the Strategic Asset Management Plans for the asset categories shown in Table 2 "Capital Spending by Asset Category."

Strategic Asset Management Plans (SAMPs) contain information about the expected costs of future projects and programs. Some information on estimated project costs is specific enough that its release could undermine contract competitiveness for BPA under the Bonneville Purchasing Instructions (BPI) and for our Federal partners under the Federal Acquisition Regulations (FAR). BPA is working on developing more public releasable versions of these documents but they are not available now. BPA would be happy to answer specific questions about information in the SAMPs.

4. What is the rate pressure for the Preferred Alternative in the CRSO process relative to the BP-20 Final Proposal?

Bonneville previously released to stakeholders the potential rate impacts of the operations from the Preferred Alternative proposed in the Draft CRSO EIS. At that time, we estimated that the potential impacts of the proposed Preferred Alternative, all else being equal, was roughly 2 percent of rate pressure relative to BP-20 power rates. This is still Bonneville's best estimate.

5. If possible, please provide the data supporting for Figures 12, 13 and 14 along with analogous data from the 2018 IPR for comparison.

Information is provided in separate Excel file.



6. Regarding the discussion of "Impacts of proposed spending level" on pages 25 to 26, what non-routine maintenance or other work will be deferred to future rate periods based on the proposed spending levels? What is the "back log" (dollar amount and list of projects/work) of non-routine maintenance in the FCRPS and what non-routine maintenance (dollar amount and list of projects/work) has been deferred over the last 5 years specifically due to budgetary constraints?

Response will follow when available.

7. Please provide the projected cash flows behind the net present values shown in Figure 11.

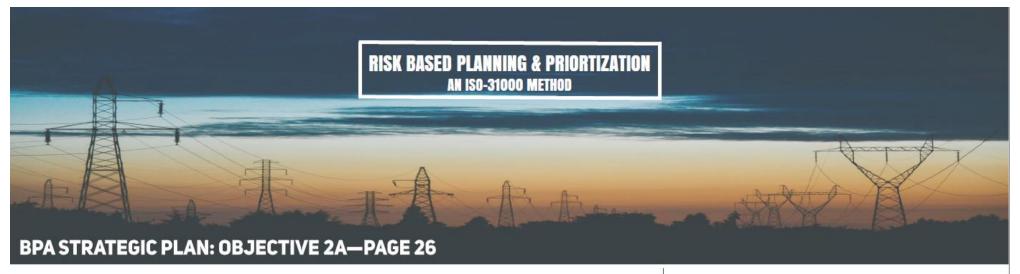
Information is provided in separate Excel file. The first two tabs are for Figure 11.

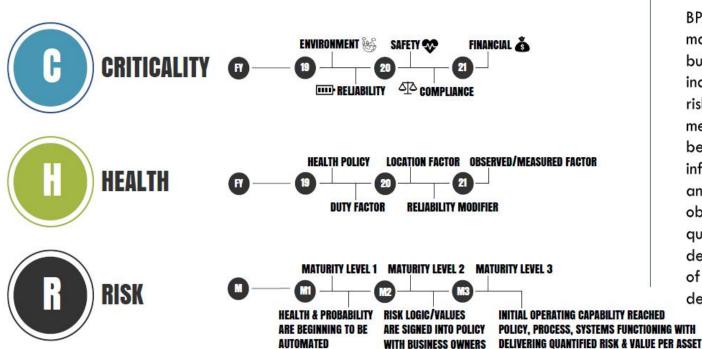
8. Regarding the "Asset Management Program Plan/SAMP Alignment" table on page 58, please describe how BPA anticipates measuring success or progress in these areas.

Through the Asset Management Program Plan we have defined 15 initiatives, each initiative contains individual milestones in order to achieve them and meet the goals outlined/defined in the "Asset Management Program Plan/SAMP Alignment" table on page 58. Some examples of initiatives that were identified are: the Criticality, Health and Risk (CHR) effort, the Secondary Capacity Model (SCM), demand planning and work scheduling capability and maturing Transmission standard practices. Success and progress for these initiatives will be measured through meeting the identified milestones and goals.

9. Please provide any additional details and documentation regarding the "criticality, health and risk" (CHR) analytical approach and how this differs from the approach taken in previous budget processes.

Previous capital forecasts includes a combination of historical retirements and depreciation studies and the use of Transmission's total economic cost models (TEC) which aggregate at the sustain capital program level a regional cost of required sustain investments to maintain reliability at current performance levels. CHR examines the survival based on actual condition data to determine asset health and holistic business impact of individual assets. This allows for integration of risk mitigation that is holistic beyond capital replacement to drive at what is the best risk spend efficiency. This is an improvement from historical forecasting methods through adoption of analytical modelling with greater granularity and real-time data. This approach has case study evidence from other heavy asset owners of financial success in opportunity costs/direct savings through the transitioning of age based to risk based asset management. Greater methodology details are described in the Institute of Asset Management Risk Chapter. A CHR one pager (below) includes additional detail on the risk based planning framework BPA has adopted.





BPA has adopted industry leading asset management standards and begun building the capabilities to understand individual asset's criticality, health and risks. Defensible and proven methodologies and analytical methods will be developed, tested and adopted to inform the prioritization of maintenance and capital investments. Transparent, objective CHR information and risk quantification will enable Transmission decision makers to optimize the utilization of financial and human resources to deliver best value for BPA and the region.

## 10. Please provide analogous data to Table 22 from the 2018 IPR process along with a narrative description of substantial changes to the distribution and overall level of the long-term capital plan between that process and now.

Our SAMPs used during the 2018 IPR process did not contain a table similar to Table 22; below is a comparison table using data from BP-20. As mentioned on Page 59 under the "Benefits of Proposed Spending Level" section we stated that the increased costs starting in 2025 under capital budget estimates in the "Upgrades and Additions" and "Other" line items was due to potential VCC costs, once the project is approved.

	BP-20 & BP-22 Out-years Comparison										
Transmission	2022		2023		2024		2025		2026		
Capital Expenditures	BP-20	BP-22	BP-20	BP-22	BP-20	BP-22	BP-20	BP-22	BP-20	BP-22	
Expand											
Main Grid	\$18,702	\$10,000	\$25,139	\$5,000	\$34,339	\$10,000	\$28,579	\$12,000	\$44,096	\$8,000	
PFIA	\$45,134	\$45,000	\$29,914	\$50,000	\$30,041	\$40,000	\$30,000	\$30,000	\$30,000	\$30,000	
Area and Customer service	\$55,347	\$40,000	\$51,852	\$60,000	\$42,186	\$50,000	\$48,099	\$40,000	\$33,072	\$40,000	
Upgrades & Additions	\$38,736	\$50,000	\$38,191	\$50,000	\$41,087	\$50,000	\$54,389	\$64,000	\$56,358	\$66,000	
Sustain											
Steel Lines	\$22,000	\$24,000	\$22,491	\$24,000	\$22,990	\$49,000	\$23,498	\$51,000	\$24,003	\$39,000	
Wood Lines	\$38,750	\$33,000	\$39,614	\$33,000	\$40,494	\$58,000	\$41,388	\$60,000	\$42,278	\$47,000	
PSC/System Telcomm	\$36,350	\$53,000	\$37,161	\$53,000	\$37,986	\$57,000	\$33,825	\$57,000	\$34,660	\$54,000	
SPC	\$20,350	\$21,000	\$20,804	\$21,000	\$21,266	\$25,000	\$21,736	\$26,000	\$22,203	\$24,000	
SUBS AC	\$41,700	\$44,000	\$42,630	\$44,000	\$43,576	\$49,000	\$44,539	\$49,000	\$45,497	\$47,000	
SUBS DC	\$11,050	\$3,000	\$11,296	\$3,000	\$11,547	\$3,000	\$11,802	\$3,000	\$12,056	\$2,000	
Other*	\$31,400	\$34,000	\$32,100	\$34,000	\$32,813	\$34,000	\$27,537	\$172,600	\$28,259	\$171,000	
Grand Total	\$359,519	\$357,000	\$351,192	\$377,000	\$358,325	\$425,000	\$365,392	\$564,600	\$372,482	\$528,000	

<sup>\*</sup>Other: Access Roads, CC System Infrastructure, Land Rights, TEAP Tools, Line Ratings, Misc. Replacement Projects

	BP-20 & BP-22 Out-years Comparison									
Transmission	2027		2028	3	202	9	2030	2031		
Capital Expenditures	BP-20	BP-22	BP-20	BP-22	BP-20	BP-22	BP-22	BP-22		
Expand										
Main Grid	\$40,351	\$7,000	\$27,296	\$10,000	\$20,896	\$10,000	\$10,225	\$10,450		
PFIA	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,675	\$31,350		
Area and Customer service	\$46,418	\$40,000	\$64,574	\$40,000	\$73,510	\$40,000	\$40,900	\$41,800		
Upgrades & Additions	\$49,464	\$55,000	\$48,038	\$44,000	\$48,238	\$44,000	\$44,990	\$45,980		
Sustain										
Steel Lines	\$24,507	\$32,000	\$25,005	\$28,000	\$25,505	\$28,000	\$28,630	\$29,260		
Wood Lines	\$43,166	\$39,000	\$44,042	\$35,000	\$44,923	\$35,000	\$35,788	\$36,575		
PSC/System Telcomm	\$35,492	\$53,000	\$36,314	\$52,000	\$37,141	\$52,000	\$53,170	\$54,340		
SPC	\$22,669	\$22,000	\$23,129	\$22,000	\$23,592	\$22,000	\$22,495	\$22,990		
SUBS AC	\$46,452	\$54,000	\$47,395	\$53,000	\$48,343	\$53,000	\$54,193	\$55,385		
SUBS DC	\$12,309	\$3,000	\$12,559	\$3,000	\$12,810	\$3,000	\$3,068	\$3,135		
Other*	\$28,979	\$87,000	\$28,689	\$27,000	\$29,402	\$27,000	\$27,608	\$28,215		
Grand Total	\$379,807	\$422,000	\$387,041	\$344,000	\$394,360	\$344,000	\$351,742	\$359,480		

<sup>\*</sup>Other: Access Roads, CC System Infrastructure, Land Rights, TEAP Tools, Line Ratings, Misc. Replacement Projects

## **Financial Disclosure**

This information was made publicly available on July 9, 2020 and contains information not sourced directly from BPA financial statements.